

WHAT IS CLAIMED IS:

- 1 1. An inspection coaxial probe, comprising:
 - 2 a conductive block, formed with a first face, a second face and a
 - 3 through hole connecting the first face and the second face;
 - 4 a contact probe, comprising:
 - 5 a conductive pipe; and
 - 6 a conductive plunger, retractably provided in at a first end of the
 - 7 pipe, the plunger being to be brought into contact with a device to be
 - 8 inspected; and
 - 9 a first retainer, comprising a first insulative member through which the
 - 10 first end of the pipe is retained in the vicinity of the first face of the block, such
 - 11 that the pipe is coaxially held within the through hole while forming a gap
 - 12 between an outer periphery of the pipe and an interior wall of the through hole.
- 1 2. The inspection coaxial probe as set forth in claim 1, wherein:
 - 2 the first insulative member is a substrate provided on the first face of
 - 3 the block, and formed with a recess and a through hole communicated with the
 - 4 recess; and
 - 5 the first end of the pipe is fitted into the recess such that the plunger
 - 6 coaxially extends through the through hole of the substrate.
- 1 3. The inspection coaxial probe as set forth in claim 1, wherein:
 - 2 a first end portion of the through hole of the block is narrowed;
 - 3 the first insulative member is a spacer formed with a recess and a

4 through hole communicated with the recess; and
5 the first insulative member is inserted into the first end portion of the
6 through hole and the first end of the pipe is fitted into the recess, such that the
7 plunger coaxially extends through the through hole of the spacer and the
8 through hole of the substrate.

1 4. The inspection coaxial probe as set forth in claim 1, further
2 comprising a conductive plate, formed with a first recess and a first through
3 hole communicated with the first recess, the plate being provided on the first
4 face of the block, wherein:

5 the first insulative member is a spacer formed with a second recess
6 and a second through hole communicated with the second recess; and

7 the first insulative member is inserted into the first recess and the first
8 end of the pipe is fitted into the second recess, such that the plunger coaxially
9 extends through the first through hole, the second through hole and the
10 through hole of the block.

1 5. The inspection coaxial probe as set forth in claim 1, further
2 comprising a second retainer, comprising a second insulative member through
3 which a second end of the pipe is retained in the vicinity of the second face of
4 the block,

5 wherein the contact probe is electrically connected to a wiring board
6 on which an inspection circuit is provided via the second end of the pipe.

1 6. The inspection coaxial cable as set forth in claim 5, wherein:
2 a first recess is formed on the second face of the block;
3 the second insulative member is a spacer formed with a second
4 recess and a through hole communicated with the second recess;
5 the spacer is fitted into the first recess and the second end of the pipe
6 is fitted into the second recess, such that the second end of the pipe is
7 electrically connected to the wiring board via the through hole of the spacer,
8 while the spacer is held by the wiring board within the first recess.

1 7. An apparatus for inspecting an electrical characteristic of a device,
2 the apparatus comprising:
3 the inspection coaxial probe as set forth in claim 1; and
4 a wiring board, on which an inspection circuit is provided, and to
5 which a second end of the pipe is electrically connected.